

Tennessee Comprehensive Assessment Program
Item Sampler

Grade 5



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Introduction

What is the TCAP Achievement Test?

The TCAP Achievement Test is a multiple-choice test designed to measure student achievement in certain skills in five subject areas: Reading, Language Arts, Mathematics, Science, and Social Studies. The sample questions in this On-Line Item Sampler are representative of the item types and item formats that will be used in the actual test, including those questions with art and without art.

What are the questions testing?

Questions are written to test student performance in State and national content areas. The State Content Standards and Performance Indicators were developed by the Tennessee Department of Education.

These Standards and Performance Indicators are listed on the State Department of Education Web site at <http://www.state.tn.us/education/ci/cistandards.htm>

Who will be tested?

All students in grades three through eight will be tested.

How long will the tests take?

The length of the tests will vary, depending on the grade level. The time limits are generous and allow most students time to finish. Extended time limits apply for students using accommodations.

How do I use the sample questions?

These questions provide information for students, parents, and teachers about the TCAP Achievement Test. The questions in the On-Line Item Sampler are representative of most of the question types that will be on the TCAP Achievement Test.

These questions can be used as a classroom learning session or as an individual, short practice test to prepare students for the actual test. Item types with and without art are presented to better familiarize students with the actual test format.

An answer key for the sample questions is provided at the end of this On-Line Item Sampler.

How will the tests be scored?

The test answers will be machine scored. Results from the test provide information about how well students performed on the content being tested.

May calculators be used?

A calculator may be used for test items that do not measure the academic skill of computation, e.g., applied concepts and algebraic problems. Calculators may be used on most TCAP Achievement Mathematics Subtests. Calculators **may not** be used on any part of the K–2 test.

Which test accommodations may be used?

The Achievement Test may be administered using various procedures (or accommodations) that are used during the student’s daily educational program. Certain conditions must be met for students to be eligible for Special and English Language Learner Accommodations.

What are some tips for preparing students for the test?

Remind students to

Relax: It is normal to be somewhat anxious before the test. Remember that the score is only one of a number of measures of performance.

Listen: Listen to and read the test directions carefully.

Plan Use of Time: First, answer all the questions you are sure about. Do not spend too much time on any one question. If a question seems to take too long, skip it and return to it later if you have extra time.

Pause and Think: If you are not sure how to answer a question, carefully read it again. Rule out answer choices that you know are incorrect and then choose from those that remain.

Reading and Language Arts



Directions

Read the passage. Then answer Numbers 1 through 7.

Lydia's Lasso

by Lesli FAVOR

"This is how you tie a lasso," said Mike. He took Lydia's rope and made a large loop in one end. Then he tied the loop to the main part of the rope with a special knot. When Mike slid the knot up or down the rope, the loop of the lasso got smaller or larger.

Lydia's eyes sparkled. "Thank you, Mike!" she said. Mike was Lydia's cousin, and he was nearly sixteen years old. "Now I can help you and Uncle Carlos round up the cattle."

"I don't think so, Lydia," said Mike. "This is hard work, and it can be dangerous. It's best if you go over by the pond and watch from there." Lydia looked over at the pond. It was a good quarter of a mile away from all the action. From there she would hardly be able to see anything. She certainly would not be able to help.

"But Mike!" she pleaded. "You might need me."

"Lydia, go on to the pond." Mike walked off to join Uncle Carlos, and Lydia was left alone, as usual.

Lydia dragged her feet all the way to the pond. She lassoed a bush, and then she lassoed a fencepost. It just wasn't the same. She wanted to lasso cattle from high atop a horse. She could do it, if only they would give her a chance.

The pond was still frozen from the winter temperatures, but Lydia could see that the edges were beginning to melt. She lassoed a log that had been frozen upright in the ice. This was boring.

Suddenly Lydia heard a sharp CRRAACCKK! She whirled around, for the sound could mean only one thing. The ice on the pond was cracking. But why?

Then she heard the soft moo. A calf! Lydia ran around the pond, her lasso trailing behind her on the snow like a friendly snake. As soon as she scrambled down the bank of the pond, she saw the calf. It was one of the first tiny calves of spring. Somehow, in the excitement of the day, it had gotten separated from its mother. It must have walked out onto the thin ice and fallen through. Now, only its head showed above the icy water and chunks of broken ice.

The calf turned large, frightened eyes to Lydia. “Mooooo!” it said again, and Lydia knew she must save it.

She grasped her lasso tightly. Then she told herself to relax. This was simple. She could lasso anything she put her mind to.

Taking a big breath, she threw the lasso at the calf’s head. It fell short. She glanced over her shoulder at the men herding the cattle, but none of them were paying attention to Lydia. As usual.

She gathered her lasso in her hands and threw it again. It bounced off the tip of the calf’s soft pink nose.

Again Lydia threw the lasso. There! The loop draped perfectly around the calf’s neck! She tugged on the rope, pulling the calf toward her like a tugboat pulling a ship through icy waters.

Finally, the calf was at the bank. Lydia’s heart pounded as she reached down to remove the lasso and pull the calf from the water. She had saved its life!

As she turned around to guide the calf up the bank, she broke into a wide smile. At the top stood Mike and Uncle Carlos. They threw their hats up into the air and let out a loud, happy cheer. They had needed her help after all.

“Lydia’s Lasso” by Lesli Favor, copyright © 2001 by CTB/McGraw-Hill.

Reporting Category: 1 Content

Performance Indicator: 5.1.spi.19 Identify and interpret the main incidents of a plot, their causes, how they influence future actions, and how they are resolved.

1 This passage is mainly about a girl who

- A** prefers to play alone
- B** forgets to obey the rules
- C** wants to have a pet calf
- D** proves she can be helpful

Reporting Category: 2 Meaning

Performance Indicator: 5.1.spi.13 Distinguish between elements of fact/opinion and reality/fantasy.

2 Which of these sentences from the passage is an opinion?

- F** "This is how you tie a lasso," said Mike.
- G** "This is hard work and it can be dangerous."
- H** It bounced off the tip of the calf's soft pink nose.
- J** The pond was still frozen from the winter temperatures.

Reporting Category: 3 Vocabulary

Performance Indicator: 5.1.spi.8 Determine the correct meaning/usage of multiple meaning words within context.

3 Read this sentence from the passage.

It was a good quarter of a mile away from all the action.

Which of these is the meaning of *quarter* as it is used in this sentence?

- A** three-month time period
- B** certain section of a town
- C** U.S. coin worth 25 cents
- D** one-fourth part of something

Reporting Category: 4 Writing/Organization

Performance Indicator: 5.2.spi.5 Select details that support a topic sentence.

4 Kim is writing a paragraph about the character Lydia in the passage "Lydia's Lasso." Read her topic sentence.

Lydia is a brave girl who wants to help more on the ranch.

Which sentence from the story best supports Kim's topic sentence?

- F** Mike was Lydia's cousin, and he was nearly sixteen years old.
- G** She lassoed a log that had been frozen upright in the ice.
- H** She wanted to lasso cattle from high atop a horse.
- J** It was a good quarter of a mile away from all the action.

Reporting Category: 5 Writing/Process

Performance Indicator: 5.2.spi.3 Identify the purpose for writing (i.e., to entertain, to inform, and to report).

5 The author most likely wrote this passage to

- A** entertain readers with a story
- B** instruct readers on how to herd cattle
- C** report a recent ranching event
- D** debate the importance of lassos

Reporting Category: 6 Grammar/Conventions

Performance Indicator: 5.3.spi.8 Identify the correct spelling of plurals and possessives.

6 Read the sentence from the passage.

It was one of the first tiny calves of spring.

What is the correct way to spell the underlined word?

- F** calfs
- G** calvs
- H** calf's
- J** Correct as it is

Reporting Category: 7 Techniques and Skills

Performance Indicator: 5.1.spi.25 Identify information to support opinions, predictions, and conclusions.

7 As a result of what happened in this passage, Lydia will probably

- A** ask for a calf to keep as a pet
- B** apologize to Mike and Uncle Carlos
- C** get more responsibilities at the ranch
- D** go to a neighbor's ranch for roping lessons

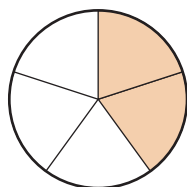
Mathematics



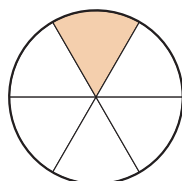
Reporting Category: 1 Number Sense/Number Theory

Performance Indicator: 5.1.spi.2 Connect symbolic representations of proper and improper fractions to models of proper and improper fractions.

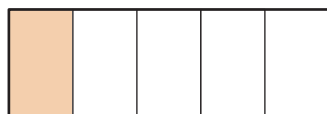
1 Which figure shows $\frac{1}{5}$ shaded?



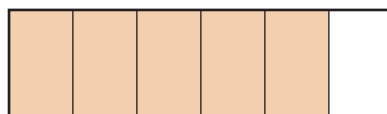
A



C



B



D

Reporting Category: 1 Number Sense/Number Theory

Performance Indicator: 5.1.spi.10 Represent numbers as both improper fractions and mixed numbers.

2 Which is $\frac{52}{7}$ written as a mixed number?

F $1\frac{3}{7}$

G $5\frac{2}{7}$

H $7\frac{2}{7}$

J $7\frac{3}{7}$

Reporting Category: 2 Computation

Performance Indicator: 5.1.spi.4 Add, subtract, multiply, and divide whole numbers (multipliers and divisors no more than two-digits).

3 Solve: $168 \div 12 = \square$

- A** 11
- B** 12
- C** 13
- D** 14

Reporting Category: 2 Computation

Performance Indicator: 5.1.spi.12 Add and subtract commonly used fractions.

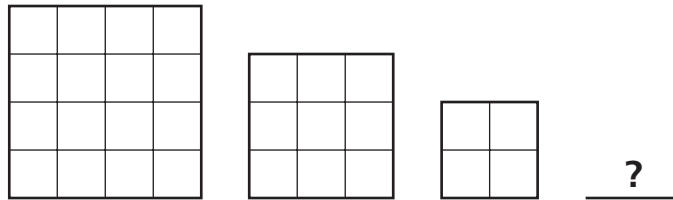
4 Tyrone made chocolate milk. He used $\frac{1}{3}$ cup of chocolate syrup and $\frac{1}{3}$ cup of milk. How much chocolate milk did he make?

- F** $\frac{2}{5}$ cup
- G** $\frac{3}{6}$ cup
- H** $\frac{2}{3}$ cup
- J** $\frac{5}{6}$ cup

Reporting Category: 3 Algebraic Thinking

Performance Indicator: 5.2.spi.2 Extend geometric patterns.

Directions Look at the pattern of figures. Then answer Number 5.



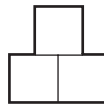
5 Which is the next figure in the pattern?



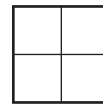
A



B



C



D

Reporting Category: 3 Algebraic Thinking

Performance Indicator: 5.2.spi.4 Connect open sentences to real-world situations.

6 There are 28 students in Ms. Woods class; 17 students are girls. Which number sentence can be used to find how many students are boys?

F $28 - \square = 17$

G $28 + 17 = \square$

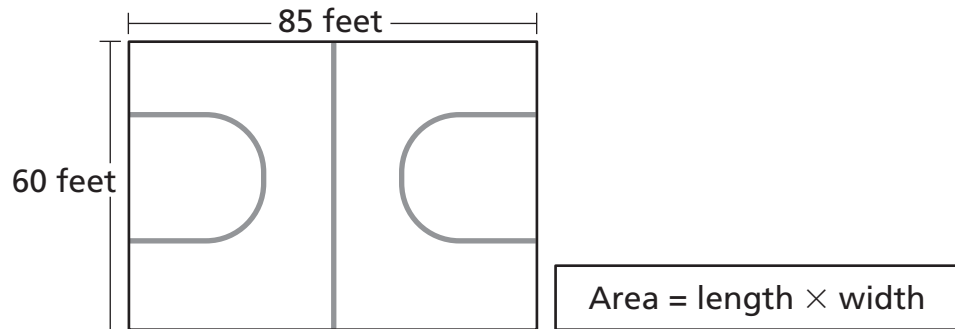
H $28 \div \square = 17$

J $28 \times 17 = \square$

Reporting Category: 4 Real World Problem Solving

Performance Indicator: 5.4.spi.10 Solve real-world problems involving perimeter and area of rectangles.

Directions Mr. Simmons is waxing the rectangular floor of the school gym. A diagram of the gym floor is shown below. Use the diagram to answer Number 7.



7 What is the area of the gym floor?

- A** 145 square feet
- B** 290 square feet
- C** 5,100 square feet
- D** 7,225 square feet

Reporting Category: 4 Real World Problem Solving

Performance Indicator: 5.4.spi.10 Solve real-world problems involving perimeter and area of rectangles.

8 Jim is putting a fence around his yard. The width of the yard is 140 feet and the length is 250 feet. How much fence is needed to enclose the yard?

- F** 390 feet
- G** 530 feet
- H** 640 feet
- J** 780 feet

Reporting Category: 5 Data Analysis and Probability

Performance Category: 5.5.spi.4 Determine the mode of a data set.

Directions The school secretary made the table below to show the number of students in each of the fifth-grade classes at Lakeside Elementary. Use the table to answer Number 9.

Fifth Grade Classes

Classes	Number of Students
Ms. Jacobs	26
Mr. Thomas	28
Mr. Miller	29
Ms. Perez	29

9 What is the mode of the numbers of fifth-grade students in the table?

A 26

B 27

C 28

D 29

Reporting Category: 5 Data Analysis and Probability

Performance Indicator: 5.5.spi.6 Represent the likelihood of an event using a fractional number from zero to one.

10 The names of Serena and her four friends are written on separate pieces of paper and put into a hat. One name is pulled out. Which fraction shows the likelihood Serena's name is pulled first?

F $\frac{1}{5}$

H $\frac{3}{4}$

G $\frac{1}{4}$

J $\frac{4}{5}$

Reporting Category: 6 Measurement

Performance Indicator: 5.4.spi.2 Use a ruler to measure to the nearest centimeter and $\frac{1}{4}$ inch.

- 11** Use the inch side of your ruler to solve this problem.



What is the length of the crayon?

- A** 2 inches
- B** $2\frac{1}{2}$ inches
- C** $2\frac{3}{4}$ inches
- D** 3 inches

Reporting Category: 6 Measurement

Performance Indicator: 5.4.spi.5 Select appropriate standard units to measure length, perimeter, area, capacity, volume, weight, time, temperature, and angles.

- 12** Ben wants to measure the time it takes for a ball to land after being thrown. He should measure in

- F** grams
- G** hours
- H** minutes
- J** seconds

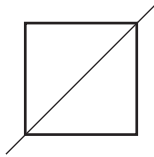
Reporting Category:

7 Geometry

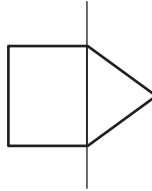
Performance Indicator:

5.3.spi.2 Identify lines of symmetry in two-dimensional geometric figures.

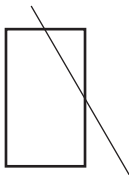
13 Which figure shows a line of symmetry?



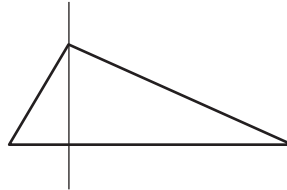
A



C



B



D

Reporting Category:

7 Geometry

Performance Indicator:

5.3.spi.3 Identify two- or three-dimensional shapes given defining attributes.

14 What figure has exactly four equal sides and four equal angles?

F square

G triangle

H pentagon

J rectangle

Science



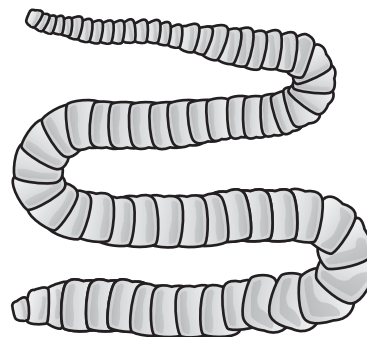
Reporting Category: 1 Structure and Function of Organisms

Performance Indicator: 5.1.spi.3 Distinguish between single cell and multicellular organisms.

Study the picture of the organism below.

1 Which of these best determines whether this is a single cell or multicellular organism?

- A** It is single cell because it is made up of one type of cell.
- B** It is multicellular because it is made up of more than one cell.
- C** It is single cell because all the cells carry out the same functions.
- D** It is multicellular because each of the cells carries out different functions.



Reporting Category: 1 Structure and Function of Organisms

Performance Indicator: 5.3.spi.1 Match plant structures with their functions.

2 What is the main function of a fruit?

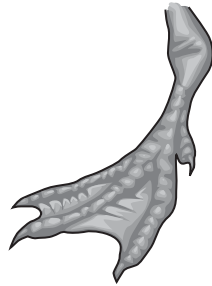
- F** to protect seeds
- G** to attract insects
- H** to store extra water
- J** to produce food for the plant



Reporting Category: 2 Ecology

Performance Indicator: 5.5.spi.2 Match the form with the function of structures in living things.

Look at the picture of the bird foot shown below.



3 This type of foot is best adapted for

- A** running
- B** swimming
- C** grasping prey
- D** keeping warm in a cold environment

Reporting Category: 2 Ecology

Performance Indicator: 5.5.spi.4 Determine which organisms are likely to survive in a particular environment.

4 This environment is very hot in the day and cool at night. There is little rainfall during the year and sometimes strong wind storms occur.

Which of these characteristics would help a plant survive in this environment?

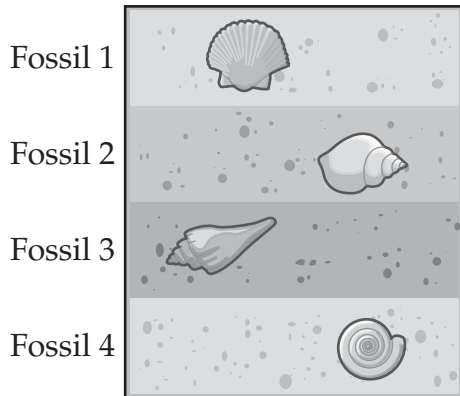
- F** thick bark
- G** a tall trunk
- H** broad thick leaves
- J** ability to store water

Reporting Category: 2 Ecology

Performance Indicator: 5.6.spi.3 Compare the relative age of fossils in rock layers.

The diagram below shows fossils in rock layers.

5 Which fossil is the oldest?



- A** Fossil 1
- B** Fossil 2
- C** Fossil 3
- D** Fossil 4

Reporting Category: 3 Life Cycles and Biological Change

Performance Indicator: 5.6.spi.1 Compare the causes that led to the extinction of various organisms.

6 Which of these is the greatest threat to the survival of large predator species, like tigers and mountain lions?

- F** global climate changes
- G** loss of other predator species
- H** animal diseases and parasites
- J** loss of large wilderness areas

Reporting Category: 4 Space, Weather, and Climate

Performance Indicator: 5.7.spi.2 Distinguish among the planets according to specific characteristics.

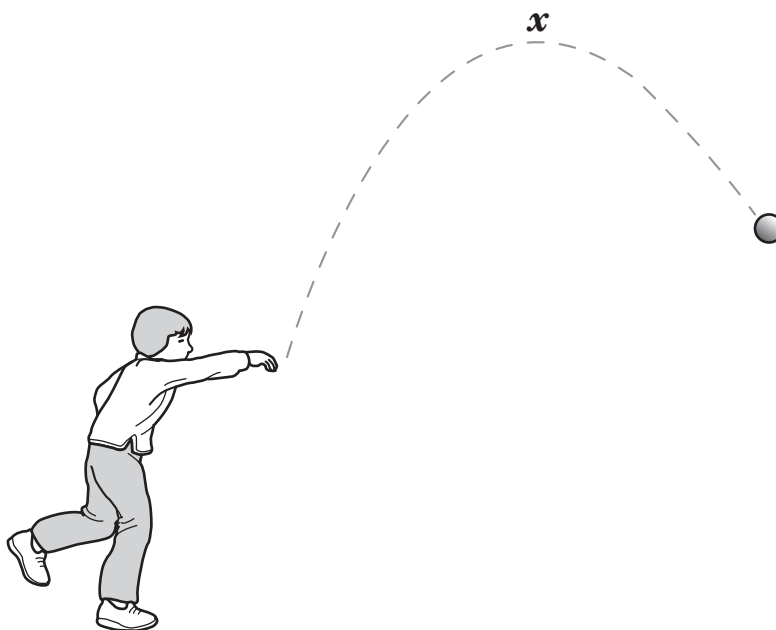
7 Which of these planets has rocky surfaces?

- A** Mercury, Earth, Jupiter, Saturn
- B** Venus, Neptune, Pluto
- C** Mercury, Venus, Earth, Mars
- D** Jupiter, Saturn, Neptune

Reporting Category: 4 Space, Weather, and Climate

Performance Indicator: 5.7.spi.3 Identify the force that pulls objects toward Earth.

The diagram below shows the path a ball followed after it was thrown into the air.



8 What caused the ball to change direction at Point x ?

- | | |
|-------------------------|---------------------------|
| F air pressure | H Earth's gravity |
| G air resistance | J Earth's rotation |

Reporting Category: 5 Earth's Features and Resources

Performance Indicator: 5.9.spi.1 Identify forces that cause geological change.

9 Which of these is most likely to cause a new island to form in the middle of an ocean?

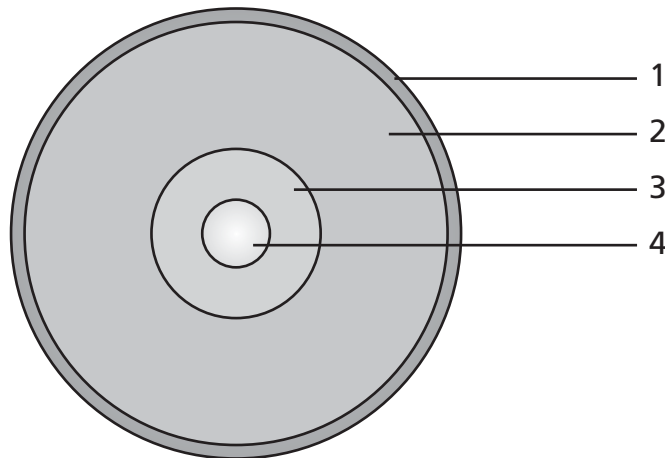
- A** glaciers
- B** earthquakes
- C** ocean currents
- D** volcanic eruptions

Reporting Category: 5 Earth's Features and Resources

Performance Indicator: 5.9.spi.3 Identify characteristics of Earth's layers.

10 The diagram below shows a cross-section of Earth's layers. Which of these layers is made up of semi-molten rock?

- F** Layer 1
- G** Layer 2
- H** Layer 3
- J** Layer 4



Reporting Category:

6 Motion and Forces, Forms of Energy

Performance Indicator:

5.14.spi.5 Differentiate between potential and kinetic energy.

11 Which of these is an example of kinetic energy?

- A** a car rolling down a hill
- B** a rock climber sitting on a peak
- C** a bicycle parked in the basement
- D** an elevator stopped at the top floor

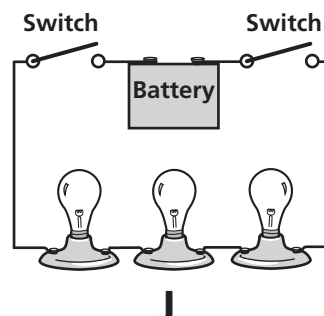
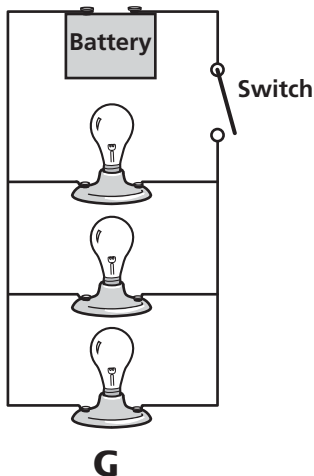
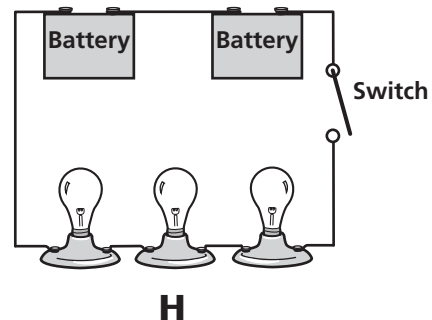
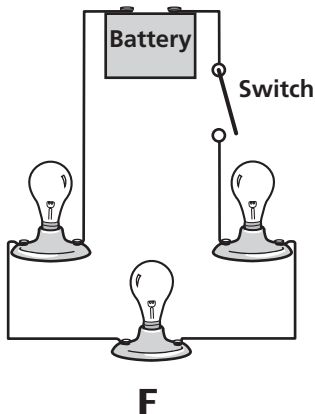
Reporting Category:

6 Motion and Forces, Forms of Energy

Performance Indicator:

5.14.spi.6 Distinguish between series and parallel circuits.

12 Which of the circuits shown below is a parallel circuit?

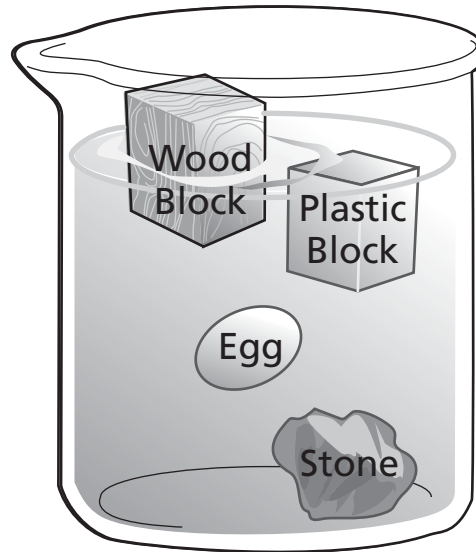


Reporting Category: 7 Matter

Performance Indicator: 5.12.spi.1 Select a material according to a description of its physical properties.

13 The picture below shows four objects in a beaker of water. Which of these objects has the lowest density?

- A** egg
- B** stone
- C** wood block
- D** plastic block



Reporting Category: 7 Matter

Performance Indicator: 5.13.spi.2 Compare the effect of physical and chemical changes on matter.

14 Which of these is an example of a chemical change?

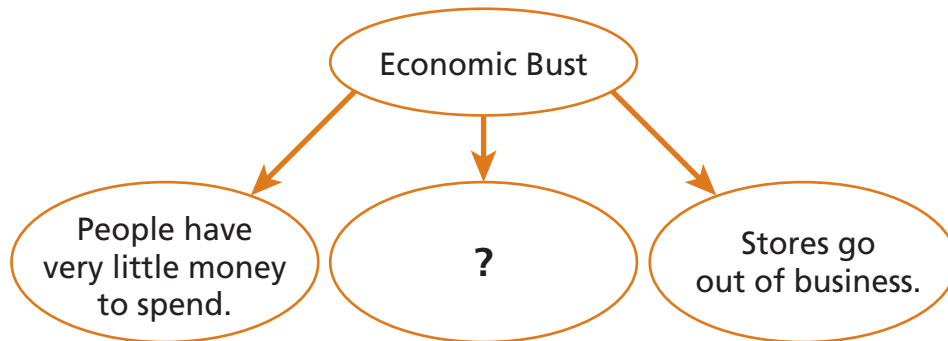
- F** a plant using sunlight to make food
- G** frost forming on plant leaves after sunset
- H** sunlight warming the soil around a plant's roots
- J** heat from the sun evaporating water from a plant's leaves

Social Studies



Reporting Category: 1 Economics

Performance Indicator: 5.2.spi.2 Differentiate between an economic boom and bust.



1 Which of these sentences best completes the diagram above?

- A** People find jobs easily.
- B** Workers earn high wages.
- C** Businesses lay off employees.
- D** Factories produce many goods.

Reporting Category: 1 Economics

Performance Indicator: 5.2.spi.5 Analyze how environmental changes and crisis affected the economy across the nation in the 1930s (i.e., Dust Bowl, Black Tuesday, Great Depression, Hoovervilles).

2 Which of these happened during the Great Depression?

- F** Factories produced more goods.
- G** Workers were paid higher wages.
- H** Workers were unable to find jobs.
- J** People had a lot of money to spend.

Reporting Category: 2 Governance and Civics

Performance Indicator: 5.4.spi.1 Distinguish between the local, state, and federal levels of the legislative, executive, and judicial branches of the American government.

Directions Use the chart below and your own knowledge to do Number 3.

**Leaders of the Executive
Branch of Government**

Level of Government	Leader
Federal	President
State	?
Local	Mayor

3 Which of these leaders best completes the chart above?

- A** Judge
- B** Senator
- C** General
- D** Governor

Reporting Category: 2 Governance and Civics

Performance Indicator: 5.4.spi.5 Differentiate among the purposes stated in the Declaration of Independence, the United States Constitution, and the Bill of Rights.

4 Which of these was the main purpose of the United States Constitution?

- F** to free the slaves
- G** to protect the rights of citizens
- H** to set up a government for the country
- J** to declare independence from Great Britain

Reporting Category: 3 Geography

Performance Indicator: 5.3.sp.5 Identify the physical and political boundaries of Tennessee.

5 Which of these states borders Tennessee?

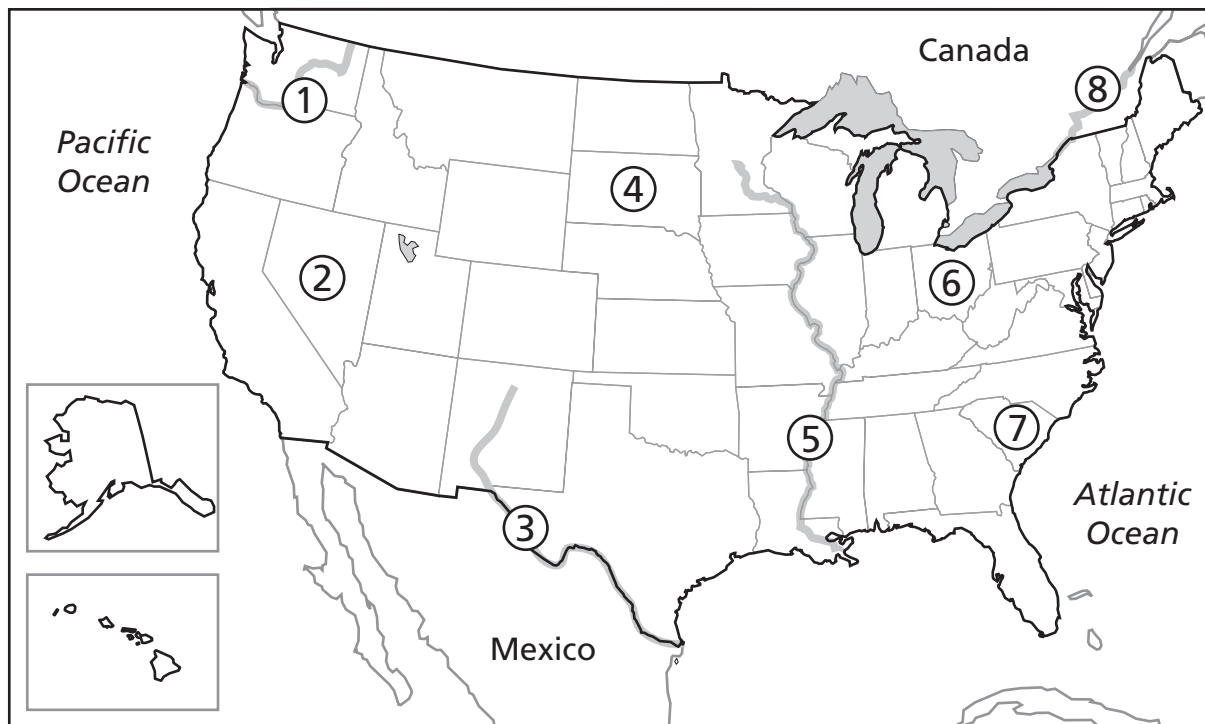
- A** Alabama
- B** Louisiana
- C** South Carolina
- D** West Virginia

Reporting Category: 3 Geography

Performance Indicator: 5.3.sp.1 Locate continents and significant bodies of water (i.e., the Great Lakes; Atlantic, Arctic, and Pacific Oceans; Columbia, Missouri, Colorado, Rio Grande, Ohio, Tennessee, St. Lawrence, and Mississippi Rivers).

Directions Use the map below and your own knowledge to do Number 6.

The United States



6 Which of these rivers is nearest Number 3 on the map above?

- F** the Columbia
- G** the Mississippi
- H** the Rio Grande
- J** the St. Lawrence

Reporting Category: 4 U.S. History Period 2 (1801–1900)

Performance Indicator: 5.1.spi.2 Interpret how culture changes over time as a consequence of industrialization, technology, or cultural diffusion (i.e., railroad transportation, telecommunication, building design, varied types of music, and the growth of government services).

7 Which of these is one way the expansion of railroads changed people's lives in the late 1800s?

- A** Farmers could ship their products faster to large cities in the East.
- B** Fewer farm families moved westward to settle on the Great Plains.
- C** Communication became slower between the east and west coasts.
- D** There were more buffalo on the plains for Native Americans to hunt.

Reporting Category: 4 U.S. History Period 2 (1801–1900)

Performance Indicator: 5.5.spi.7 Interpret a primary reading sample.

Directions Use the passage below and your own knowledge to do Number 8.

A house divided against itself cannot stand. I believe this government cannot endure permanently half slave and half free. I do not expect the Union to be dissolved—I do not expect the house to fall—but I do expect it will cease to be divided. It will become all one thing or all the other.

—from a speech by Abraham Lincoln, 1858

8 The conflict described above led to

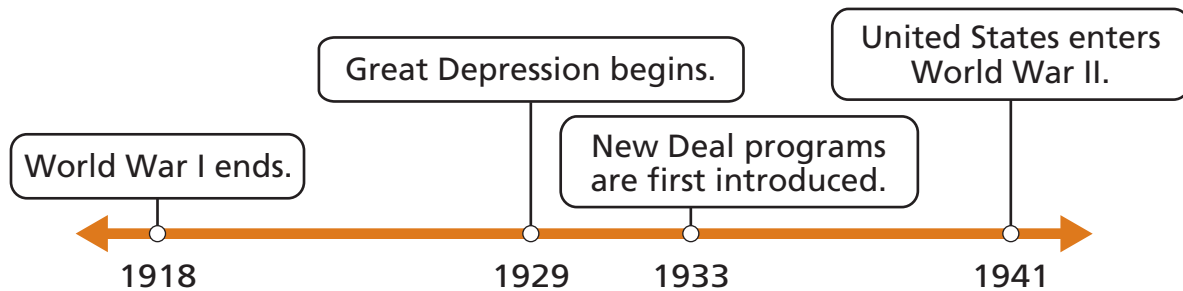
- F** the writing of the Bill of Rights
- G** a war between the North and the South
- H** the gaining of new states and territories
- J** a war between the United States and Great Britain

Reporting Category: 5 U.S. History Period 3 (1890–Present)

Performance Indicator: 5.5.spi.3 Interpret timelines that depict major historical post-Civil War events.

Directions Use the time line below and your own knowledge to do Number 9.

Some Important Events in United States History



9 In what year did the collapse of the United States economy begin?

- A** 1918
- B** 1929
- C** 1933
- D** 1941

Reporting Category: 5 U.S. History Period 3 (1890–Present)

Performance Indicator: 5.5.spi.8. Recognize examples of how the United States confronted Civil Rights issues (i.e., *Brown v. Board of Education*, Montgomery Bus Boycott, Birmingham Civil Rights march, American Indian Movement (AIM), Civil Rights Act of 1964).

10 In *Brown v. Board of Education*, the United States Supreme Court ruled that

- F** segregated schools are unconstitutional
- G** women have the right to vote in elections
- H** presidents should serve for only two terms
- J** newspapers are free to print what they want

Answer Key

Reading and Language Arts

1	D
2	G
3	D
4	H
5	A
6	J
7	C

Mathematics

1	B
2	J
3	D
4	H
5	A
6	F
7	C
8	J
9	D
10	F
11	C
12	J
13	A
14	F

Science

1	B
2	F
3	B
4	J
5	D
6	J
7	C
8	H
9	D
10	G
11	A
12	G
13	C
14	F

Social Studies

1	C
2	H
3	D
4	H
5	A
6	H
7	A
8	G
9	B
10	F